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Checking Mountain Soil Moisture Under the Snow, an important factor in snowmelt runoff.

Federal-State Cooperative
Snow Surveys and Water Supply Forecasts
for
Colorado River, Rio Grande,
Platte River and Arkansas River
Drainage Basins

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AND
COLORADO AGRICULTURAL EXPERIMENT STATION
AND

STATE ENGINEER OF NEW MEXICO

Data included in this report were obtained by the agencies named above
in cooperation with the U. S. Forest Service, National Park Service, Bur-
eau of Reclamation, State Engineers of Colorado and Wyoming; and
other Federal, State and local organizations.

— AS OF —
FEB. 1, 1956



UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY
AND WATER SUPPLY FORECAST REPORTS:

Snow surveys in the West are conducted each year at more than 1200 snow courses. Basin and Province or State snow survey reports summarizing the results of the measurements and forecasts of seasonal runoff and water supply are issued by the Soil Conservation Service, U. S. Department of Agriculture and some of its co-operators; the Water Rights Branch of the British Columbia Department of Lands and Forests; and the California Division of Water Resources.

Copies of the various federal-state cooperative snow survey reports listed below may be secured by writing to:

Head, Water Supply Forecasting Section
Soil Conservation Service
209 S. W. 5th Avenue
Portland 4, Oregon

BASIN REPORTS:

- Colorado, Rio Grande,.. Issued monthly February through May by SCS and and Platte-Arkansas Colorado Experiment Station, Fort Collins, Colorado.* River Basins
- Columbia River..... Issued monthly January through May by Soil Conservation Basin Service, Boise, Idaho.*
- Upper Missouri..... Issued monthly February through May by SCS and River Basin Montana Agricultural Experiment Station, Bozeman, Montana.*
- West-Wide Water..... Issued April 1 by Soil Conservation Service and Supply Outlook Cooperators, Portland, Oregon.

STATE REPORTS:

- Arizona..... Issued semi-monthly January 15 through April 1 by SCS and Salt River Valley Water Users Association, Phoenix, Arizona.*
- Nevada..... Issued monthly February through April by SCS and Nevada State Engineer, Reno, Nevada.*
- Oregon..... Issued monthly January through May by SCS, Portland, Oregon, and Oregon Agricultural Experiment Station.*
- Utah..... Issued monthly January through May by SCS, Salt Lake City, Utah, and State Engineer of Utah and Utah Agricultural Experiment Station.*
- Washington..... Issued monthly February through May by SCS, Spokane, Washington, and State Department of Conservation and Development.*
- Wyoming..... Issued monthly February through May by SCS, Casper, Wyoming, and State Engineer of Wyoming.*

*Special reports are issued as needed.

The British Columbia reports are issued February 1 through June 1 and may be secured from Comptroller, Water Rights Branch, Department of Lands and Forests, Parliament Buildings, Victoria, B.C.

The California reports are issued monthly February 1 through May 1 and may be secured from Division of Water Resources, California Department of Public Works, Sacramento, California.

The annual water supply forecasts of the Weather Bureau are available in monthly bulletins published from January through May. These bulletins entitled, "Water Supply Forecasts for the Western United States" may be obtained from River Forecast Center, Weather Bureau, 712 Federal Office Building, Kansas City 6, Missouri.

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

February 8, 1956

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General Series Paper No. 630
Colorado Agricultural Experiment Station

This report is the first of a series combining three former snow reports, one for the Rio Grande, one for the Platte and Arkansas Rivers and one for the Colorado River. It contains current snow measurements for Colorado, New Mexico and Arizona and for the Platte and Green River drainages in Wyoming. Reports for March 1 and April 1 will also contain snow measurements for the Colorado River drainage in Utah.

WATER SUPPLY OUTLOOK
COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
February 1, 1956

The water supply outlook for southern Wyoming, Colorado and New Mexico is much improved over the past two years. Snow cover in the mountains ranges from normal to fifty percent above normal. In Arizona snow fall has been extremely light.

In contrast to the 1954 and 1955 seasons, streamflow from snow melt is expected to be above normal on many of the major streams in Colorado and southern Wyoming in 1956. As of February 1 the seasonal snowfall ranged from normal to 50 percent above normal in this area. During a storm at the end of January irrigated areas on both sides of the Continental Divide were covered with snow except in extreme western Colorado where rain occurred. Subsoils are dry but surface soil moisture is in better condition than for the past two years. In northern New Mexico the snow pack is normal or less and in Arizona there has been practically no snow to date this season.

Even in areas where the current snow pack is good, adequate water supplies for the next irrigation season are not necessarily assured in eastern Colorado. The snow accumulation season is only half completed. If snowfall should be light between now and May, shortages could occur in the heavy water demand areas of the South Platte and Arkansas Rivers. The long term effects of the extended drouth period and lack of reservoir storage must be considered.

Because of high snow cover in western Colorado normal or better stream flow is almost certain for the main rivers. Shortages will probably occur on tributary streams where water is usually short. Storage in the larger reservoirs on the west slope is less than average but will have an opportunity to fill with this year's expected runoff.

In the San Luis Valley of Colorado snow cover at high elevations is above normal but short of that for this date during the heavy snow year of 1952. Flow of the major streams is expected to be near or possibly in excess of average. The flow of the Rio Grande through New Mexico will be less than average but well above the past three years.

Runoff from the snow pack to date in Arizona will be negligible but there is still opportunity for late winter and spring storms. Total storage on the Salt River project is down a little over 200,000 acre-feet from about 875,000 a year ago.

NORTH PLATTE

The February 1 snow pack on the North Platte drainage in Colorado and Wyoming is 35 percent above normal on February 1. Soil moisture is above average under the snow in the mountains of Wyoming and near normal along the Continental Divide in Colorado. A normal inflow to Seminoe Reservoir is almost assured for 1956. The outlook from snow pack alone is approximately the same as the heavy snow year of 1952. However, the possibility of a runoff in the 1952 range is remote for 1956. Storage in the four major reservoirs on the North Platte drainage in Wyoming is now 875,000 acre-feet, most of which is assigned to the Alcova project. Again in reference to 1952, storage is about one-half of what was available at that time. There is plenty of capacity for any runoff from snow melt. Current stream flow is about normal. Surface soil moisture conditions are relatively good. The general water supply outlook for the main stem of the North Platte is good and much improved over the past two years.

On the Laramie River moisture conditions in Wheatland area are reported as poor and there is practically no storage. The snow pack in the Laramie watershed is well above normal and runoff is expected to be at least normal for the next snow melt season.

SOUTH PLATTE

The seasonal snow pack ranges from slightly above normal on the Saint Vrain watershed to about 50 percent above normal on the Cache La Poudre and on Clear Creek and on the South Platte above Denver. A detailed study of snow measurements shows that the high elevation snow is up to 50 percent above normal while snow at lower elevations is much less. This is probably due to melting of the snow at lower elevations during warm weather between the heavy storms of late November and early December and late January. The effect of this warm winter weather should be favorable to increasing runoff from the snow pack. Precipitation during the fall months was deficient and mountain soils were dry. The most probable flow of South Platte tributaries should range from normal to slightly above normal, somewhat less than indicated by the current snow pack.

Storage in smaller irrigation reservoirs is generally a little above that for 1955 on the upper tributaries as well as on the lower South Platte, but is substantially short of the average carryover. If snowfall during the remainder of the season continues above average the shortage in reservoirs need not be serious. In the Colorado-Big Thompson system the shortage is more acute. Restrictions in delivery are planned. Storage in this system now totals 235,000 acre-feet and compared 315,000 a year ago and 518,000 on February 1, 1954. Inflow to Granby Reservoir should be near normal and greater than for 1955. Storage in Denver Municipal reservoirs on the South Platte are down slightly from a year ago.

Surface soil moisture conditions are much improved over the past two years but subsoil is dry as a result of a dry fall. Stream flow in the upper Platte near Denver is reported as below normal. On the northern tributaries and on the lower South Platte streamflow is near normal for this date.

In summary, the water supply outlook on the South Platte and tributaries is much improved on 1954 and 1955. The improvement in respect to normal will depend on late season snowfall.

ARKANSAS

The water supply outlook for the Arkansas River is much improved over the past two years. The snow pack on the headwaters of the stream near Tennessee and Fremont Passes is near 150 percent of average. Near Independence and Monarch Passes to the south the snow cover declines to near normal. At La Veta Pass the amount of snow is again high as a result of the storm at the end of January. Snowfall in the valley has been relatively light as compared to elsewhere in Colorado and irrigated soils are dry. The most probable flow of the Arkansas River and its tributaries is near normal for 1956. Reservoir storage on the southern tributaries has improved over a year ago but other reservoirs on the headwaters and to the north of the river are empty or contain water in storage similar to February 1, 1955. There are 52,000 acre-feet remaining in John Martin reservoir of the over 200,000 acre-feet which was stored during the disastrous flood of May, 1955.

COLORADO

The water supply outlook for all areas of western Colorado is good. Measurements on snow courses in the high mountains runs from 25 to 75 percent above normal for February 1. During the end-of-January storm, snow or rain fell at valley elevations. Even if snowfall during the remainder of the season is deficient adequate water supplies are assured for the major streams. Shortages may occur in irrigated areas along tributary streams but they should not be as severe as in 1954 and 1955. On the upper Yampa, White and Colorado heavy snow has occurred in valley areas down to 8000 foot elevations. There was also good snowfall in the Durango area. Less snowfall or rainfall has been received on the Uncompahgre project or near Grand Junction. Surface soil moisture over western Colorado is reported as fair to good but subsoils are dry due to lack of rainfall during the fall months. Mountain soils are dry over the whole western slope.

Storage in Green Mountain Reservoir is 77,000 acre-feet as compared to 46,000 a year ago. Vallecito Reservoir on the Pine River project contains 42,000 acre-feet as compared to 56,000 on February 1, 1956. Taylor Park Reservoir serving the Uncompahgre project now contains 35,000 acre-feet, down 15,000 from last year.

The snow cover on the Green River in Wyoming and on Utah tributaries is all well above normal. Above normal runoff in these areas is almost certain as of this time.

In Arizona snowfall has been extremely light. Snow-melt runoff from snow that has occurred to date will be negligible. Soils at high elevations are wet where snow has melted but elsewhere soils are dry. There is the possibility of snow in late winter and early spring.

RIO GRANDE

Snow cover along the Continental Divide to the west and north of the Rio Grande in San Luis Valley is well above normal for February 1. The Wolf Creek Pass area has snowfall 50 percent above normal for this date and over twice that for February 1 of the past three years. The snow pack

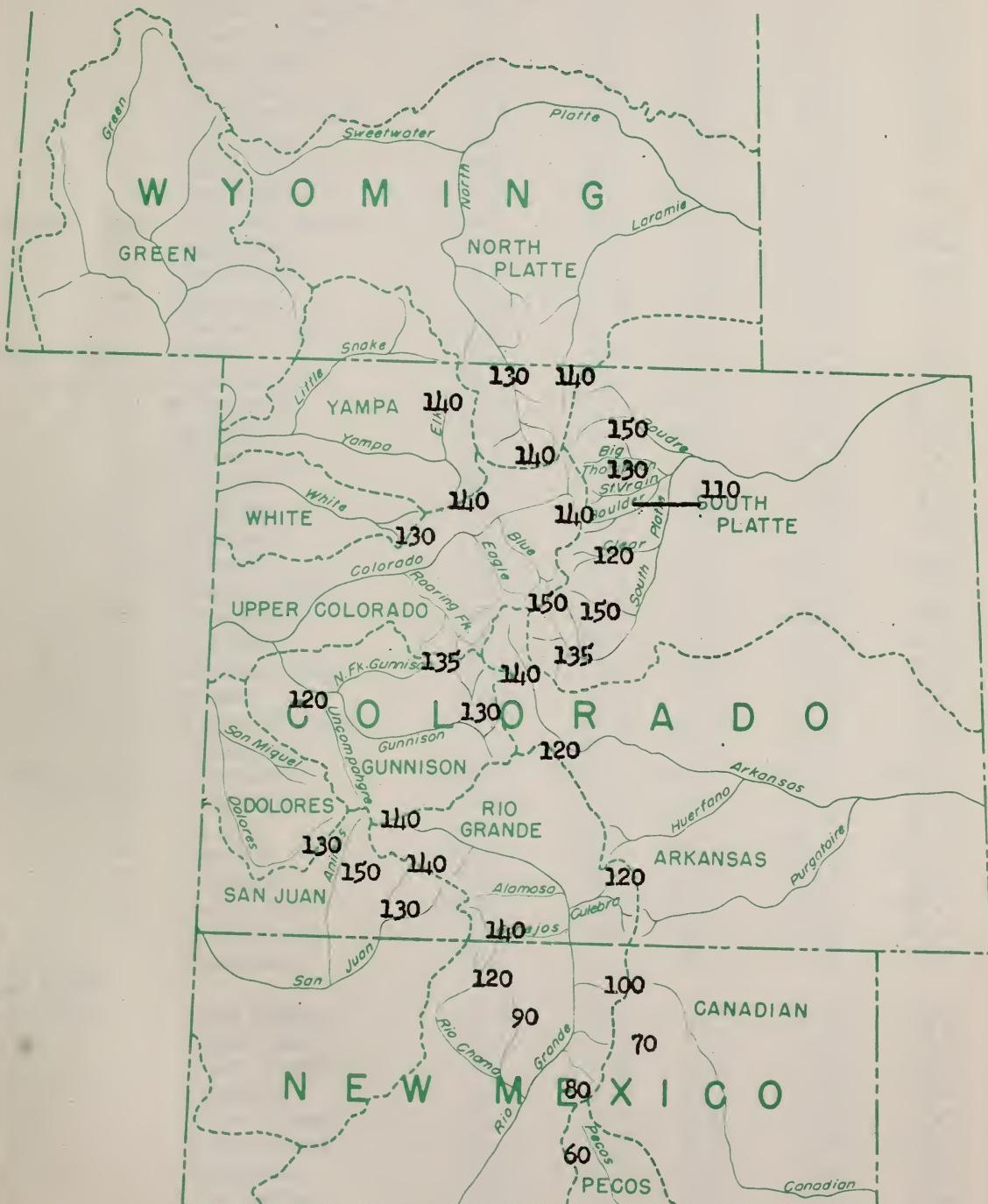
is substantially less than that for this date in the heavy snow year in 1952. At the present time there is no indication of damaging heavy stream flow during the snow melt season. Summer runoff on the Rio Grande, Conejos and Alamosa Rivers is expected to be average with a possible runoff well in excess of average. The outlook could change substantially with mountain snowfall from now through May. East of the Rio Grande on the Sangre de Cristo Range snowfall has also been above average with most of the snow pack coming in late January. Snowfall at medium and lower elevations is much less in respect to average than at high elevations.

Storage in San Luis Valley irrigation reservoirs is slightly above February 1, 1955 but less than the long term average. Sanchez Reservoir on the Culebra now contains 13,500 acre-feet as compared to 3500 a year ago and an average of about 12,000. Soil moisture conditions in the San Luis Valley area are reported as about normal with a light snow covering the valley.

The snow pack in northern New Mexico is generally less than normal with most of the remaining snow coming in late January. The flow of the Rio Grande in New Mexico will probably be less than normal but well above that for water years 1954 and 1955. Inflow to El Vado Reservoir should be near normal but less than normal flow from tributary streams is expected to occur below the dam. Soils are dry in both the middle Rio Grande Valley and in southern New Mexico. Storage in Elephant Butte and Caballo Reservoirs is now about 200,000 acre-feet, which is slightly higher than for a year ago but only 20 percent of normal.

WATER CONTENT OF SNOW ON THE WATERSHEDS OF
PLATTE, ARKANSAS, UPPER COLORADO AND RIO GRANDE BASINS
BASED ON SNOW SURVEYS MADE APPROXIMATELY FIRST DAY OF MONTH

In Percent of Normal
February 1, 1956



Note: These figures represent current mountain snow cover only. For comments on water supply outlook see narrative section of the report.

STATUS OF RESERVOIR STORAGE, FEBRUARY 1, 1956

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (THOUS.A.F.)	USABLE STORAGE--1000 ACRE FEET			
			1956	1955	1954	15-year Avg. 1938-52
MISSOURI RIVER						
Poudre River	Windsor	18.6	3.0	2.7	2.9	8.2
" "	Cache la Poudre	9.5	4.0	3.6	4.9	5.5
" "	Fossil Creek	11.6	3.2	2.3	4.1	6.1
" "	Terry Lake	8.2	5.9	2.1	4.1	3.9
" "	Halligan	6.4	2.2	1.7	1.4	1.5
" "	Chamber's Lake	8.8	1.0	1.0	0.9	2.4
" "	Cobb Lake	34.3	0.0	0.0	7.0	4.6
" "	Black Hollow	8.0	0.9	0.9	3.4	3.3
" "	Horsetooth	143.5	48.1	66.0	104.6	--*
Big Thompson River	Lake Loveland	14.3	7.2	5.2	7.6	4.6
" " "	Boyd Lake	44.0	0.0	0.0	8.5	15.4
" " "	Lone Tree	9.2	7.5	5.8	7.1	5.3
" " "	Mariano	5.4	0.6	0.3	2.2	1.6
" " "	Carter Lake	112.4	37.6	45.9	0.0	--*
St. Vrain River	Union	12.7	1.6	1.0	6.1	6.8
South Platte River	Eleven Mile	81.9	24.4	17.3	81.9	75.5
" " "	Cheeseman	79.0	21.6	25.0	27.8	55.9
" " "	Marston	18.9	15.3	13.6	15.6	14.4
" " "	Barr Lake	32.2	13.0	9.5	12.9	17.7
" " "	Milton	24.4	0.9	0.0	3.1	9.2
" " "	Standley	18.5	6.1	2.6	4.5	8.7
" " "	Marshall	10.3	0.9	0.0	0.4	2.1
" " "	Antero	33.0	0.0	10.2	10.2	13.6
" " "	Horse Creek	20.6	7.1	0.0	5.5	7.6
" " "	Riverside	57.5	19.3	17.6	36.3	38.5
" " "	Empire	37.7	13.6	0.0	20.8	21.1
" " "	Jackson Lake	35.4	25.3	22.1	29.6	27.2
" " "	Prewitt	32.8	0.0	4.9	9.4	19.7
" " "	Point of Rocks	70.0	26.4	23.1	37.2	43.8
" " "	Julesburg	28.2	20.8	20.4	19.8	20.3
North Platte River	Kingsley	2180.0	824.5	1120.8	1485.0	1087.7*
" " "	Minatare	60.8	21.0	19.9	23.3	23.4
" " "	Alcova	190.0	170.0	171.5	166.9	82.3*
" " "	Seminoe	1025.0	331.0	328.4	251.6	381.3*
" " "	Guernsey	46.0	28.1	16.8	41.9	34.4
" " "	Pathfinder	1045.5	353.6	425.0	813.9	348.9
" " "	Sutherland	185.0	56.8	42.6	48.6	47.6
Laramie River	Wheatland	70.4	--	1.0	7.8	28.5
ARKANSAS RIVER						
Arkansas River	Twin Lakes	57.9	15.8	13.5	13.1	24.7
" "	Sugar Loaf	17.4	7.1	5.1	5.1	7.8
" "	Clear Creek	11.4	4.3	1.2	0.6	5.5
" "	Meredith	41.9	0.0	0.0	0.0	15.0
" "	Horse Creek	26.9	0.0	0.0	0.0	7.9
" "	Adobe Creek	61.6	0.0	0.0	0.0	24.2
" "	Cucharas	40.0	12.1	0.0	0.1	5.9
" "	Two Buttes	40.9	--	0.0	0.0	13.4
" "	John Martin	655.0	52.0	2.8	9.6	59.4*
" "	Great Plains	150.0	0.0	0.0	0.0	44.2
Purgatoire River	Model	15.0	1.9	0.1	1.7	3.1

*Shorter periods

RESERVOIR STATUS
(continued)

STREAM	RESERVOIR	USABLE CAPACITY 1000 A.F.	USABLE STORAGE - 1000 ACRE FEET			
			1956	1955	1954	15-yr. Avg. 1938-1952
COLORADO DRAINAGE						
Taylor River	Taylor Park	106.2	34.8	49.0	47.4	60.1
Los Pinos River	Vallecito	126.3	42.0	56.3	33.2	40.8*
Groundhog Creek	Groundhog	21.7	3.5	4.0	3.5	7.8*
Blue River	Green Mountain	146.9	77.6	46.6	85.5	73.0*
Colorado River	Granby	467.5	204.2	413.8	447.3	--*
Colorado River	Lake Mead	27935.0	11231.0	12305.0	16604.0	19100.0
Colorado River	Lake Havasu	688.0	605.3	613.0	611.0	554.8*
Colorado River	Lake Mohave	1818.3	1645.2	1653.0	1678.0	--
SALT AND GILA DRAINAGE						
Salt River	Roosevelt	1420.0	216.0	528.9	611.3	422.3
" "	Apache	245.0	243.3	222.3	244.0	184.6
" "	Canyon	58.0	53.6	18.5	54.5	29.3
" "	Saguaro	70.0	66.8	53.2	39.9	19.1
Verde River	Bartlett	200.0	75.8	54.4	38.8	49.6
Aqua Fria River	Carl Pleasant	173.0	27.8	23.2	32.5	19.9
Gila River	San Carlos	1200.0	74.8	38.1	0.0	16.7
	Horseshoe	143.0	2.5	1.8	1.5	156.6*
RIO GRANDE						
	Rio Grande	45.0	4.0	4.7	4.7	14.1
	Santa Maria	45.0	2.4	2.4	2.1	8.9
	Sanchez	103.0	13.5	3.5	2.9	12.3
	Terrace	17.7	1.0	2.9	1.2	2.8
	Continental	26.7	1.3	4.0	4.0	6.9
	Platoro	60.0	0.0	0.0	0.0	-- *
	Elephant Butte	2273.7	183.0	122.4	137.1	892.6
	Caballo	365.0	10.0	18.9	16.5	173.3
CHAMA RIVER	El Vado	226.0	0.3	0.0	3.8	58.8
CANADIAN RIVER	Conchas	600.0	265.3	144.9	167.9	260.5*
PECOS RIVER	Alamogordo	148.0		79.2	35.1	63.3
	McMillan-Avalon	45.0		37.6	5.1	14.7

*Shorter periods

100 - 1000

COOPERATIVE SNOW SURVEYS

SUMMARY OF SNOW MEASUREMENTS

February 1, 1956

WATERSHEDS	No. of Courses Averaged	Years of Record	February 1, 1956 Water Contents as percent of		
			1955	1954	Average
PLATTE RIVER					
Sweetwater	11	18-20	177	194	137
North Platte River	13	7-20	177	189	132
Laramie River	8	7-20	195	218	137
South Platte River*	4	7-17	169	138	125
Poudre River	6	7-17	187	200	146
Big Thompson River	3	7-17	227	181	132
St. Vrain River	3	6-18	272	174	108
Boulder Creek	3	6-17	221	164	120
Clear Creek	3	7-16	219	230	157
ARKANSAS RIVER					
	7	6-20	205	148	123
COLORADO RIVER					
Colorado River*	17	7-20	209	205	144
Roaring Fork	3	10-20	200	157	138
Plateau Creek	2	12-19	131	143	129
Yampa River	4	15-20	147	205	147
White River	2	16-20	139	182	132
Gunnison River	8	7-20	165	169	130
Dolores River	3	7-17	272	207	114
San Juan River	5	14-16	254	196	133
Animas River	3	17-19	262	306	169
Gila River	9	8-18	71	142	81
Salt River	6	6-18	67	122	59
Verde River	9	6-10	16	32	19
Little Colo. River	7	6-18	48	83	42
Williams River	3	10			
Lower Colo. River	4	8-9	70	118	51
RIO GRANDE					
Rio Grande (Colo.)	11	7-17	226	160	121
Upper Rio Grande	3	16-17	226	164	135
Alamosa River	2	11-16	227	204	145
Conejos River	2	15-17	267	245	121
Culebra River	1	16	378	142	98
Rio Grande (N.M.)	14	6-17	196	113	90
Chama River	5	6-17	265	267	111
Pecos River	3	14-17	163	104	68
Canadian River	3	14-17	140	83	69

95	44	101	101	101
96	45	102	102	102
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102	51	108	108	108
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364	313	370	370	370
365	314	371	371	371
366	315	372	372	372
367	316	373	373	373
368	317	374	374	374
369	318	375	375	375
370	319	376	376	376
371	320	377	377	

VALLEY PRECIPITATION 1/

Division Averages and Departures 3/

DRAINAGE DIVISIONS	Fall Sept.-Oct.-Nov. 1955		Winter December 1955	
	Average	Departure ^{2/}	Average	Departure ^{2/}
NORTH PLATTE RIVER, Wyo.	2.07	-1.14	.83	-.09
SOUTH PLATTE River	1.80	-1.35	.43	-.12
ARKANSAS River	1.45	-1.53	.32	-.38
COLORADO River	3.16	-1.52	1.94	+.43
GREEN River, Wyo.	2.26	-.49	.95	+.31
SAN JUAN River, New Mexico	.65	-2.49	.84	-.06
COLORADO River, Arizona				
GILA River, Arizona				
CANADIAN River, New Mexico	2.55	-1.09	.14	-.59
RIO GRANDE, Colo.	.83	-1.63	.30	-.12
RIO GRANDE (N) New Mexico	1.16	-2.65	.68	-.46
RIO GRANDE (S) New Mexico	1.66	-.86	.11	-.47
PECOS River, New Mexico	3.26	-.47	.42	-.16

1/ Preliminary analysis by U.S. Weather Bureau from data furnished by Meteorological Service of Canada and U.S. Weather Bureau.

2/ Departure from 15-year (1938-1952) drainage division average.

3/ Selected Stations.

Yunnan Provincial Museum

10. The following table shows the number of hours worked by each employee.

FEDERAL-STATE COOPERATIVE SNOW SURVEYS

February 1

Soil Moisture Stations Measurements

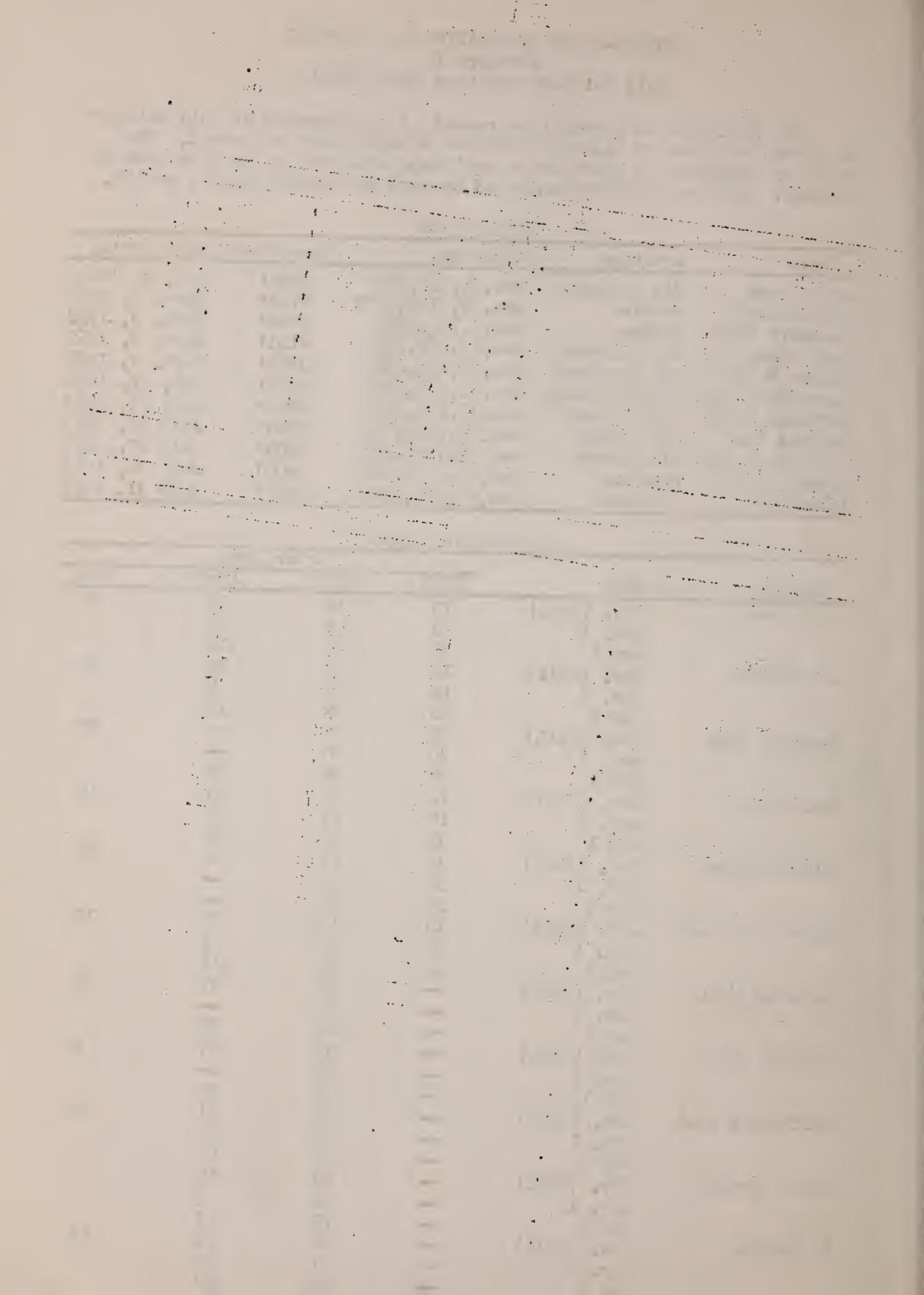
The following is a tentative record of measurements of soil moisture at eleven stations in Colorado with two or more years of record. The readings indicate the approximate available moisture in the root zone in percent. Wilting point is indicated by zero and field capacity as 100.

DESCRIPTION

Name	Drainage	Location	Elevation	Date Est'd.
Longs Peak	Big Thompson	Sec. 34, T4N, R73W	9200'	Aug. 7, 1952
Red Feather	Poudre	Sec. 30, T10N, R73W	8700'	Sept. 2, 1952
Chambers Lake	Poudre	Sec. 5, T7N, R75W	9000'	Sept. 3, 1952
Deer Ridge	Big Thompson	Sec. 13, T5N, R74W	9100'	Sept. 9, 1952
Hidden Valley	Big Thompson	Sec. 22, T5N, R74W	10300'	Sept. 9, 1952
University Camp	Boulder Creek	Sec. 26, T1N, R73W	9900'	Oct. 22, 1952
Berthoud Falls	Clear Creek	Sec. 15, T3S, R75W	10700'	July 25, 1953
Bristol View	Rio Grande	Sec. 27, T41N, R3W	9000'	July 29, 1953
Wolf Creek Pass	Rio Grande	Sec. 33, T38N, R2E	9800'	July 29, 1953
River Springs	Conejos	Sec. 25, T33N, R6E	8600'	July 30, 1953
Leadville	Arkansas	Sec. 21, T8S, R79W	10500'	July 31, 1953

MEASUREMENT RECORD

Station	Date	Water Year			
		1953	1954	1955	1956
Longs Peak	Nov. (Fall)	10	19	25	12
	Apr. 1	10	17	20	
	May 1	35	89	101	
Red Feather	Nov. (Fall)	15	22	16	21
	Apr. 1	12	16	4	
	May 1	40	89	116	
Chambers Lake	Nov. (Fall)	25	32	—	29
	Apr. 1	20	20	—	
	May 1	39	98	32	
Deer Ridge	Nov. (Fall)	12	25	31	16
	Apr. 1	10	17	28	
	May 1	32	81	106	
Hidden Valley	Nov. (Fall)	38	47	90	50
	Apr. 1	30	40	—	
	May 1	30	92	—	
University Camp	Nov. (Fall)	10	13	20	12
	Apr. 1	10	12	17	
	May 1	33	91	113	
Berthoud Falls	Nov. (Fall)	—	10	37	18
	Apr. 1	—	10	—	
	May 1	—	101	70	
Bristol View	Nov. (Fall)	—	39	47	2
	Apr. 1	—	39	—	
	May 1	—	50	25	
Wolf Creek Pass	Nov. (Fall)	—	34	61	30
	Apr. 1	—	24	52	
	May 1	—	89	50	
River Springs	Nov. (Fall)	—	40	10	8
	Apr. 1	—	34	8	
	May 1	—	72	17	
Leadville	Nov. (Fall)	—	11	21	42
	Apr. 1	—	7	12	
	May 1	—	90	49	



COOPERATIVE SNOW SURVEYS
February 1, 1956

Drainage Basin and Snow Course	Snow Cover Measurements								
	No.	Elev.	Date of Survey	1956		Past Record		Years of Record	
				Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1955	1954	
COLORADO RIVER (above Glenwood Springs)									
Cameron Pass*(a)	5J1	10300	1/29	58	18.0	9.7	8.9	12.5	17
Park View*	6J2	9200	1/31	27	6.5	3.3	3.8	6.0	18
Phantom Valley	5J4	9300	2/1	41	9.0	5.2	4.3	6.2	20
Hoosier Pass	6K1	11400	2/1	43	9.6	4.5	6.6	6.6	17
Berthoud Pass	5K3	9700	1/31	50	12.6	6.6	5.7	9.2	20
Tennessee Pass	6K2	10200	1/31	47	9.6	3.2	4.0	5.6	20
M. Fork Camp Gr.	5K4	9000	1/31	35	8.5	4.1	3.8	6.3	19
Willow Creek P.	6J5	9500	1/31	43	10.0	5.6	5.2	7.6	16
N. Inlet Grand L.	5J9	9000	2/4	33	8.1	4.8	4.2	5.8	17
Lake Irene	5J10	10600	2/4	66	20.5	8.9	11.5	13.4	17
Arrow	5K6	9900	1/31	42	9.5	4.7	3.5	5.8	17
Fremont Pass #2	6K8	11400	2/1	56	14.6	6.5	8.4	9.6	20
Shrine Pass	6K9	10500	2/1	61	16.8	6.4	7.8	10.5	14
Grizzly Peak	5K9	11250	1/31	67	17.7	7.4	7.1	11.3	14
Glen-Mar Ranch	5K10	8850	1/31	33	7.5	3.1	4.0	7.1	8
Granby	5K16	8700	2/1	34	7.9	4.3	2.5	5.7	7
Grand Lake	5J19	8600	1/31	42	9.0	4.7	3.5	7.6	7
Berthoud Summit	5K14	11300	2/3	56	15.6	9.0	7.1	---	5
Frazer View	5K15	10600	2/2	44	11.3	5.4	4.0	---	5
Gore Pass	6J11	8900	1/31	37	8.8	6.1	3.3	---	4
Frisco	6K13	9300	1/31	35	7.8	3.3	4.3	---	5
Snake River	5K16	9700	1/31	42	7.8	3.2	4.5	---	5
ROARING FORK									
Ind. Pass Tunnel	6K4	10700	1/30	52	12.9	6.4	9.4	10.4	20
N. Lost Creek(a)	7K1	9200	2/3	44	10.6	6.2	NS	7.5	14
Ivanhoe	6K10	10400	1/30	59	17.0	7.9	9.5	11.4	10
YAMPA RIVER									
Dry Lake (a)	6J1	8200	1/28	61	18.3	13.2	9.5	11.9	15
Columbine Lodge*	6J3	9300	1/30	70	21.1	13.9	8.9	14.3	20
Elk River (a)	6J4	8700	1/28	55	16.0	14.1	8.2	9.6	16
Routt Line	6J8	9700	1/30	85	26.3	18.2	13.0	---	5
Rabbit Ears	6J9	9550	1/30	85	26.5	14.0	12.5	---	5
Yampa View	6J10	8500	1/30	47	12.0	8.1	6.2	---	5
Old Battle*	6H10	9800	1/30	84	25.0	13.5	12.5	19.2	18

*On Adjacent Drainage

**Courses with less than 15 years in period 38-52 have all years prior to 52 average.

(a) Air Observed

NS - No survey

COOPERATIVE SNOW SURVEYS
February 1, 1956

Drainage Basin and Snow Course	No.	Elev.	1956			Snow Course Measurements				Years of Record	
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Past Record		Water Content (In.)	1955	1954	1938-52 Average
COLORADO RIVER											
WHITE RIVER										**	
Burro Mountain (a)	7K2	9000	2/3	50	12.0	10.1	8.8	10.4		20	
Rio Blanco	7J1	8500	2/1	51	14.2	8.6	5.6	9.3		16	
PLATEAU CREEK											
Mesa Lakes	7K4	10000	1/29	44	12.2	10.2	10.0	9.2		19	
Trickle Divide(a)	7K5	10000	2/3	65	19.5	14.0	12.2	15.4		12	
GUNNISON RIVER											
Crested Butte	6L1	9000	2/1	54	17.7	6.1	4.7	8.5		20	
Park Cone	6L2	9700	2/1	44	9.1	4.3	5.6	6.0		20	
Alexander Lake(a)	7K3	10000	2/3	53	14.6	11.0	9.1	13.2		19	
Ironton Park	7M6	9800	2/1	45	11.8	4.1	4.2	7.3		19	
Trickle Divide(a)	7K5	10000	2/3	65	19.5	14.0	12.2	15.9		12	
Park Reservoir (a)	7K6	9500	2/3	60	18.0	12.4	11.5	14.3		12	
Porphyry Creek	6L3	10800	1/30	50	11.2	6.5	7.6	9.6		16	
Cochetopa Pass	6L6	10000	1/30	24	5.0	2.8	5.1	3.7		7	
McClure Pass(a)	7K8	9500	2/3	54	17.3	9.3	6.0	--		2	
SAN JUAN RIVER											
Wolf Creek Pass*	6M1	10000	1/31	91	25.2	10.4	13.3	17.6		16	
Upper San Juan	6M3	10000	1/31	98	25.8	11.5	11.9	20.0		16	
Granite Peaks	7M7	7950	1/31	35	7.3	2.7	3.0	5.6		14	
Wolf Creek Summit	6M17	11000	1/31	90	22.2	9.0	9.9	--		5	
Chama Divide*	6N2	7750	2/1	22	5.0	1.2	4.1	4.4		16	
Chamita*	6N3	8500	2/1	44	9.0	2.6	4.8	7.0		14	
ANIMAS RIVER											
Silverton Sub.S.	7M4	9400	2/1	34	7.8	3.4	0.0	4.1		17	
Cascade	7M5	8850	2/1	56	13.4	5.2	6.6	8.2		17	
Ironton Park	7M6	8700	2/1	45	11.8	4.1	4.2	7.3		19	
Spud Mt.	7M1	10700	2/1	83	23.1	9.9	13.8	--		5	
Molas Lake	7M12	10500	2/1	53	12.2	6.1	5.3	--		5	
Howardville	7M13	9800	2/1	47	10.9	5.5	7.3	--		5	
DOLORES RIVER											
Rico	7M1	8700	1/31	41	8.4	2.8	2.6	6.4		16	
Telluride	7M2	8600	1/31	36	6.1	1.8	4.3	5.2		17	
Trout Lake	7M9	9700	1/31	53	11.5	5.0	5.8	11.3		7	

*On adjacent drainage

**Course with less than 15 years in period 38-52 have all years prior to 52 in the average.

NS - No survey

(a) Air observed

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage and Snow Course	Snow Course Measurements								
	Number	Elev.	1956			Past Record			Years of Record
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1955	1938-52	
COLORADO RIVER									
SALT RIVER									
Forest Dale	10R6	6430	2/1	NS	NS	2.2	1.0	1.3	16
McNary	9R2	7200	2/1	NS	NS	3.1	2.3	3.1	17
Nutrioso	9S4	8500	2/1	13	2.5	2.1	0.6	2.5	18
Coronado Trail	9S7	8000	2/1	12	2.3	2.5	0.7	3.7	18
Milk Ranch	9R1	7000	2/1	NS	NS	2.5	2.2	1.9	15
Gentry	10R5	7600	2/1	11	1.9	3.6	2.5	3.8	6
Heber	10R4	7600	2/1	11	1.8	4.0	2.5	4.1	6
Canyon Creek	10R3	7500	2/1	12	1.7	4.4	2.7	4.6	6
Maverick Fork	9S2	9020	2/1	NS	NS	5.6	4.6	7.9	6
Baldy	9S1	9125	2/1	NS	NS	4.7	5.0	6.4	6
Fort Apache	9R5	9160	2/1	NS	NS	4.3	5.6	6.3	6
Pacheta	9S5	7800	2/1	18	2.9	2.9	1.7	3.7	6
LITTLE COLORADO RIVER									
Forest Dale*	10R6	6000	2/1	NS	NS	2.2	1.0	1.3	16
McNary	9R2	7200	2/1	NS	NS	3.1	2.3	3.1	17
Nutrioso*	9S4	8500	2/1	13	2.5	2.1	0.6	2.5	18
Mormon Lake	11R4	7350	2/1	7	1.1	5.4	3.5	6.6	9
Fort Valley	11P2	7350	2/1	8	1.5	3.0	1.2	3.7	9
Gentry	10R6	7600	2/1	11	1.9	3.6	2.5	3.8	6
Heber	10R4	7600	2/1	11	1.8	4.0	2.5	4.1	6
Canyon Creek	10R3	7500	2/1	12	1.7	4.4	2.7	4.6	6
Mormon Mt.	11R3	7500	2/1	11	2.7	5.6	3.4	6.0	6
GILA RIVER									
Frisco Divide	8S1	8000	2/1	11	2.5	2.8	0.7	2.1	18
State Line	9S8	8000	2/1	13	2.1	3.7	1.2	2.9	18
Nutrioso	9S4	8500	2/1	13	2.5	2.1	0.6	2.5	18
Taylor Creek	7S1	7850	2/1	5	0.5	0.0	0.0	0.7	14
Coronado Trail	9S7	8000	2/1	12	2.3	2.5	0.7	3.7	18
Inman	7S2	7800	2/1	6	0.5	0.0	--	0.8	10
Beaver Head	9S6	8000	2/1	13	1.5	2.6	1.8	3.2	18
Rose Canyon	10T2	7300	2/1	6	1.1	3.2	2.9	0.8	8
Bear Wallow	10T1	8100	2/1	10	2.6	4.6	3.3	2.4	8

*On adjacent drainage

**Courses with less than 15 yrs. in period 38-52 have all year prior to 52 averaged.

NS-No Survey

222 J. C. R. ANDERSON

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage Basin and Snow Course	Snow Course Measurements								
	Number	Elev.	1956			Past Record			Years of Record
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1955	1954	
COLORADO RIVER									

VERDE RIVER

Iron Springs*	12R2	6200	2/1	0	0	4.5	0.8	1.4	10
Camp Wood	12R1	5700	2/1	0	0	2.8	2.1	1.4	10
Mingus Mountain	12R3	7100	2/1	0	0	2.7	1.2	1.9	9
Mormon Lake*	11R4	7350	2/1	7	1.1	5.4	3.5	6.6	9
Fort Valley*	11P2	7350	2/1	8	1.5	3.0	1.2	3.7	9
Chalendar*	12P1	7100	2/1	5	0.5	4.4	1.8	4.1	9
Munds Park	11R1	6500	2/1	0	0	4.8	2.3	2.7	6
Casner Park	11R2	6930	2/1	4	0.8	5.7	3.2	4.9	6
Mormon Mt.	11R3	7500	2/1	11	2.7	5.6	3.4	6.0	6

WILLIAMS RIVER

Iron Springs	12R2	6000	2/1	0	0	4.5	0.8	1.4	10
Camp Wood*	12R1	5700	2/1	0	0	2.8	2.1	1.4	10
Willow Ranch	13P1	5000	2/1	0	0	0.0	0.0	1.2	10

LOWER COLORADO RIVER

Bright Angel	12N1	8400	2/1	30	6.6	4.7	4.3	9.2	8
Grand Canyon	11P1	7500	2/1	10	1.7	2.5	1.4	3.3	8
Fort Valley	11P2	7350	2/1	8	1.5	3.0	1.2	3.7	9
Chalendar	12P1	7100	2/1	5	0.5	4.4	1.8	4.1	9

RIO GRANDE IN COLORADO

Wolf Creek Pass	6M1	10000	1/31	91	25.2	10.4	13.3	17.6	16
Upper Rio Grande	6M2	9350	2/1	34	6.0	2.7	5.5	5.3	16
Silver Lakes	6M4	9600	1/31	36	7.3	2.6	2.6	4.7	16
River Springs	6M5	9300	1/31	29	6.0	2.4	2.9	6.0	15
La Veta Pass #2	5M1	9300	2/2	33	8.5	3.4	6.1	5.6	16
Summitville (a)	6M6	11500	2/2	33	8.5	7.5	8.8	11.3	11
Cumbres Pass#2(a)	6M7	10000	2/2	64	17.9	6.5	6.8	13.7	17
Santa Maria	6M8	9700	2/1	22	4.7	2.9	3.1	3.8	17
Culebra	5M3	10000	2/1	34	6.8	1.8	4.8	6.9	16
Ft. Garland	5M4	8200	2/1	11	1.0	0.0	1.5	2.0	15
Cochetopa Pass	6L6	10000	1/30	24	5.0	2.8	5.1	3.7	7
Howardville	6M13	9800	2/1	47	10.9	5.5	7.3		5
Wolf Creek Summit	6M17	11100	1/31	90	22.2	9.0	9.9		5

* On adjacent drainage

** Courses with less than 15 years in period 38-52 have all years prior to 52 averaged

(a) Air observed

NS -No Survey

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage Basin and Snow Course	Snow Cover Measurements									
	Number	Elev.	Date of Survey	1956		Water Content (In.)	Past Record			Years of Record
				Snow Depth (In.)	Water Content (In.)		1955	1954	1938-52 Average	
UPPER RIO GRANDE										
Wolf Creek Pass	6M1	10000	1/31	91	25.2	10.4	13.3	17.6	16	
Upper Rio Grande	6M2	9350	2/1	34	6.0	2.7	5.5	5.3	16	
Santa Maria	6M8	9700	2/1	22	4.7	2.9	3.1	3.8	17	
ALAMOSA RIVER										
Silver Lakes	6M4	9600	1/31	36	7.3	2.6	2.6	4.7	16	
Summitville (2)	6M6	11500	2/2	63	15.8	7.5	8.8	11.3	11	
CONEJOS RIVER										
River Springs	6M5	9300	1/31	29	6.0	2.4	2.9	6.0	15	
Cumbres Pass #2 (a)	6M7	10000	2/2	64	17.9	6.5	6.8	13.7	17	
CULEBRA RIVER										
Culebra	5M3	10000	2/1	34	6.8	1.8	4.8	6.9	16	
RIO GRANDE IN NEW MEXICO										
Red River	5N1	9500	2/3	27	5.5	2.4	4.2	5.5	16	
Taos Canyon	5N2	9000	1/31	18	3.7	3.2	3.6	4.7	16	
Aspen Grove	5P1	9100	1/31	17	3.5	1.8	2.7	3.8	17	
Hematite Park*	5N3	9500	1/31	14	1.6	2.0	4.0	3.7	15	
Tres Ritos	5N4	9000	1/31	17	3.4	2.4	3.0	4.5	17	
Pay Role (a)	6N1	9700	2/2	25	5.0	2.9	5.4	7.1	15	
Chama Divide	6N2	7750	2/1	22	5.0	1.2	4.1	4.4	16	
Chamita	6N3	8500	2/1	44	9.0	2.6	4.8	7.0	14	
Cordova (a)	5N5	10100	2/2	27	5.5	3.0	5.7	7.1	14	
Panchuela #2	5P2	8300	1/30	11	1.6	0.8	1.8	3.1	17	
Big Tesuque	5P3	10000	1/31	14	2.8	2.1	3.0	4.4	14	
Elk Cabin	5P4	8350	2/2	16	3.2	1.4	3.1	2.5	8	
Rio En Medio	5P5	10400	1/31	22	4.6	2.4	4.6	3.7	6	
Bateman	6N4	9300	1/30	48	8.1	4.0	6.0	8.5	6	
Fenton Hill	6P2	8900	1/30	23	4.2	1.1	2.3	4		

* - On adjacent drainage

**- Courses with less than 15 years in period 38-52 have all years prior to 52 averaged

(a)- Air observed

NS- No Survey

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage Basin and Snow Course	Snow Cover Measurements							
	Number	Elev.	Date of Survey	1956		Past Record		
				Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1955	1954
CHAMA RIVER								
Cumbres Pass #2(a)	6M7	10000	2/2	64	17.9	6.5	6.8	13.7
Pay Role (a)	6N1	9700	2/2	25	5.0	2.9	5.4	7.0
Chama Divide	6N2	7750	2/1	22	5.0	1.2	4.1	4.4
Chamita	6N3	8500	2/1	44	9.0	2.6	4.8	7.0
Bateman	6N4	9300	1/30	48	8.1	4.0	6.0	8.5
PECOS RIVER								
Aspen Grove*	5P1	9500	1/31	17	3.5	1.8	2.7	3.8
Panchuela	5P2	9200	1/30	11	1.6	0.8	1.8	3.1
Big Tesuque*	5P3	9000	1/31	14	2.8	2.1	3.0	4.4
CANADIAN RIVER								
Hematite Park	5N3	9500	1/31	14	1.6	2.0	4.0	3.7
Tres Ritos*	5N4	9000	1/31	17	3.4	2.4	3.0	4.5
Cordova* (a)	5N5	10100	2/2	27	5.5	3.0	5.7	7.1

* - On adjacent drainage

** - Courses with less than 15 yrs in period 38-52 have all years prior to 52 averaged.

(a) - Air observed

NS - No Survey

10. *Leucosia* (L.) *leucostoma* (L.)

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage Basin and Snow Course	Snow Cover Measurements							Years of Record
	Number	Elev.	Date of Survey	1956		Past Record		
				Snow Depth (In.)	water Content (In.)	Water Content (In.)	1955	1954

PLATTE RIVER

SWEETWATER RIVER

Grannier Meadows	8G4	9000				4.5	9.7	9.7	14
South Pass*	8G3	9000				5.5	10.6	9.6	14

NO. PLATTE RIVER

Cameron Pass (a)	5J1	10300	1/29	58	18.0	9.7	8.9	12.5	17
Park View	6J2	9200	1/31	27	6.5	3.8	3.8	6.0	18
Columbine Lodge	6J3	9300	1/30	70	21.1	13.9	8.9	14.3	20
Willow Cr. Pass*	6J5	9500	1/31	44	10.0	5.6	5.2	7.6	16
Northgate	6J7	8500	1/31	27	5.0	2.3	2.0	4.4	6
Bottle Creek	6H8	8200	1/30	44	11.8	6.4	6.9	8.2	18
Webber Spring	6H9	9000	1/30	56	15.4	8.1	7.8	10.8	18
Old Battle	6H10	9800	1/30	84	25.0	13.5	12.5	19.2	18
N. French Creek	6H4	10200	1/31	76	23.1	12.8	14.8	16.7	18
N. Barrett Creek	6H5	9400	1/31	56	15.5	8.9	8.7	11.5	18
Ryan Park	6H6	8400	1/31	40	10.2	6.6	4.4	6.8	18
Albany	6H11	9400	2/3	42	12.0	5.4	6.0	11.1	7
La Bonte	5G2	8450	1/29	14	3.3	3.8	3.5	4.7	7
Boxelder	5G1	9000	1/30	11	2.8	NS	3.1		5

LARAMIE RIVER

Deadman Hill (a)	5J6	10200	1/29	54	14.0	5.7	6.1	7.3	12
Roach (a)	5J12	9800	1/28	48	14.0	8.2	9.5	10.7	14
Brooklyn Lake	6H1	10200	1/31	62	19.3	11.3	8.6	13.6	18
Fox Park	6H12	9200	1/28	28	5.8	3.4	1.7	5.5	20
Pole Mtn. #2*	5H1	8700	2/2	19	4.8	2.9	1.8	3.1	19
Libby Lodge	6H3	8700	1/31	34	9.2	4.5	3.6	6.2	18
Hairpin Turn	6H2	9500	1/31	35	9.9	4.5	3.7	7.1	18
Albany	6H11	9400	2/3	42	12.0	5.4	6.0	11.1	7

POUDRE RIVER

Cameron Pass (a)	5J1	10300	1/29	58	18.0	9.7	8.9	12.5	17
Chambers Lake	5J2	9000	2/5	30	7.8	5.5	3.5	5.0	17
Big South	5J3	8600	2/5	11	2.3	1.7	0.1	1.7	17
Deadman Hill (a)	5J6	10200	1/29	54	14.0	5.7	6.1	7.3	12
Lake Irene*	5J10	10600	1/4	66	20.5	8.9	11.5	13.4	17
Red Feather	5J20	9000	2/2	27	5.8	5.3	3.8	6.7	7
Lost Lake	5J23	9300	2/5	41	11.6	6.0	4.4		5

NS - No Survey

* - On adjacent drainage

** - Courses with less than 15 years in period 38-52 have all years prior to 52 averaged

(a) - Air observed

COOPERATIVE SNOW SURVEYS

February 1, 1956

Drainage Basin and Snow Course	Number	Elev.	Snow Cover Measurement				Past Record			Years of Record
			Date or Survey	Snow Depth (In.)	Water Content (In.)	1955	1954	Average 1938-52		
BIG THOMPSON RIVER										
Lake Irene*	5J10	10600	2/4	66	20.5	8.9	11.5	13.4	17	
Hidden Valley	5J13	9550	2/1	36	9.3	4.2	5.8	7.8	15	
Deer Ridge	5J17	9050	2/1	24	5.1	2.2	1.8	5.3	7	
Longs Peak	5J22	10500	1/29	41	11.1	3.0	5.0	5.0	5	
ST. VRAIN RIVER										
Wild Basin	5J5	10000	2/2	39	10.7	4.5	5.5	8.6	18	
Copeland Lake	5J18	8600	2/2	20	4.5	1.5	1.7	5.9	7	
Ward	5J21	9500	2/3	20	5.3	1.6	4.5	4.6	6	
BOULDER CREEK										
E. Port. Moffat T.	5K1	9400	1/30	25	5.2	2.2	1.9	3.1	17	
University Camp	5J8	10300	1/29	54	15.2	6.9	13.3	11.5	17	
Moffat	5K12	9400	1/30	32	8.0	3.7	2.1	9.1	6	
CLEAR CREEK										
Loveland Pass	5K5	10600	1/31	56	14.5	7.0	6.6	8.3	16	
Grizzly Peak*	5K9	11250	1/31	67	17.7	7.4	7.1	11.3	14	
Empire	5K10	9650	2/3	30	6.6	3.4	3.1	5.1	7	
Berthoud Falls	5K13	10500	2/2	46	11.5	6.3	5.6	5.6	5	
Clear Creek	5K17	11200	1/31	57	14.5	8.2	6.5	8.2	4	
SOUTH PLATTE RIVER (Above Denver)										
Hoosier Pass	6K1	11400	2/1	43	9.6	4.5	6.6	6.6	17	
Fairplay	6K2	10000	2/1	9	1.7	1.1	0.0	1.0	17	
Jefferson Cr.	5K8	10100	2/1	38	7.3	4.4	5.8	4.9	16	
Geneva Park	5K11	9750	1/31	14	2.9	2.9	3.1	4.8	7	
ARKANSAS RIVER										
Tennessee Pass	6K2	10200	1/31	47	9.6	3.2	4.0	5.6	20	
Twin Lakes T.	6K3	10500	1/31	33	6.9	4.8	4.9	6.9	18	
La Veta Pass*	5F1	9300	2/2	33	8.5	3.4	6.1	5.6	16	
4-Mile Park	6K7	9700	2/1	19	3.3	1.7	2.3	2.9	16	
Fremont Pass	6K8	11400	2/1	56	14.6	6.5	8.4	9.6	20	
Monarch Pass	6L4	10500	1/30	52	11.6	7.0	8.6	10.5	15	
St. Elmo (a)	6L5	10600	2/2	40	8.8	4.0	8.1	10.1	6	
Timberline	6K11	11100	1/30	56	17.4	NS	8.7	8.7	5	

NS - No survey

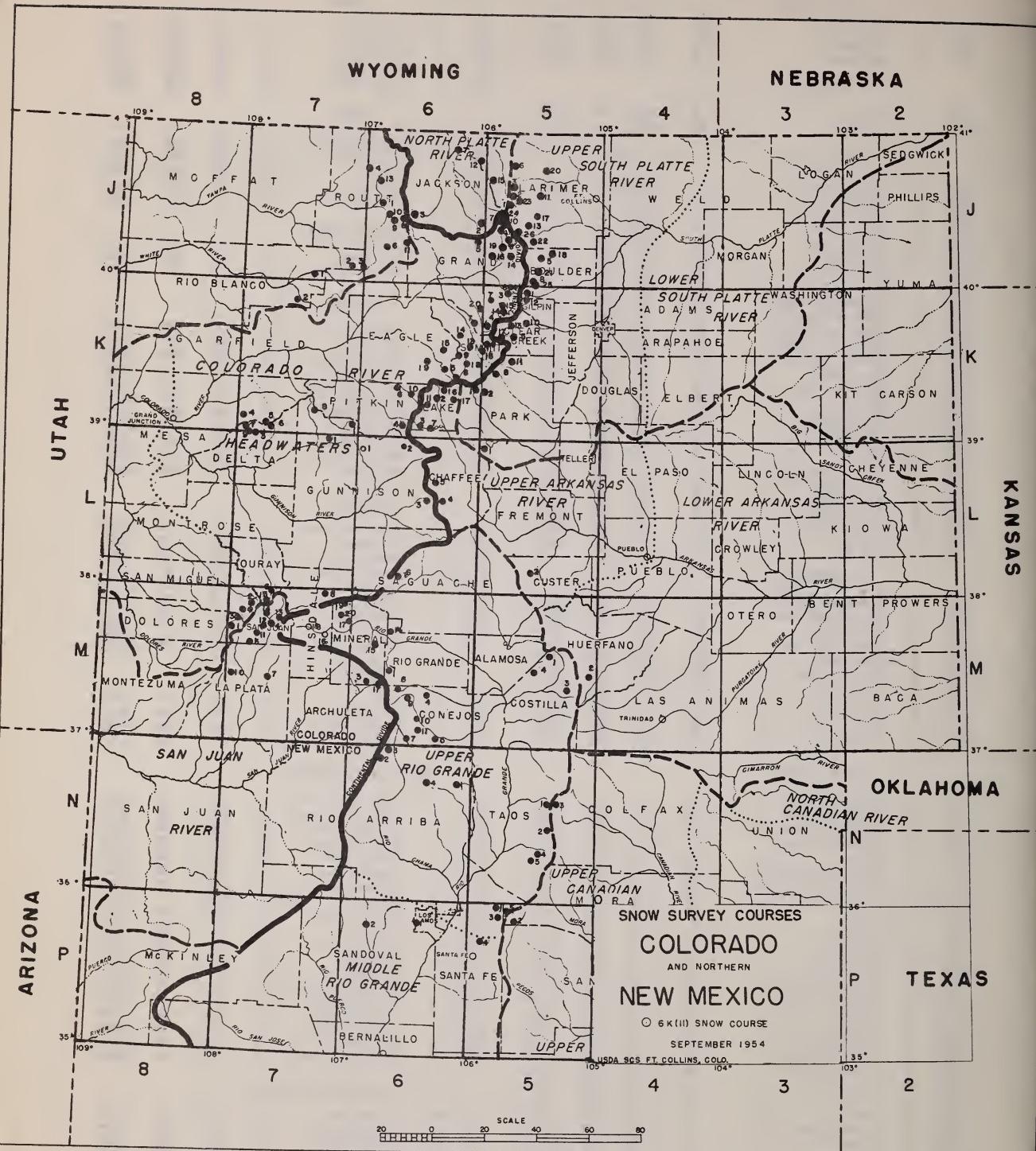
* - On adjacent drainage

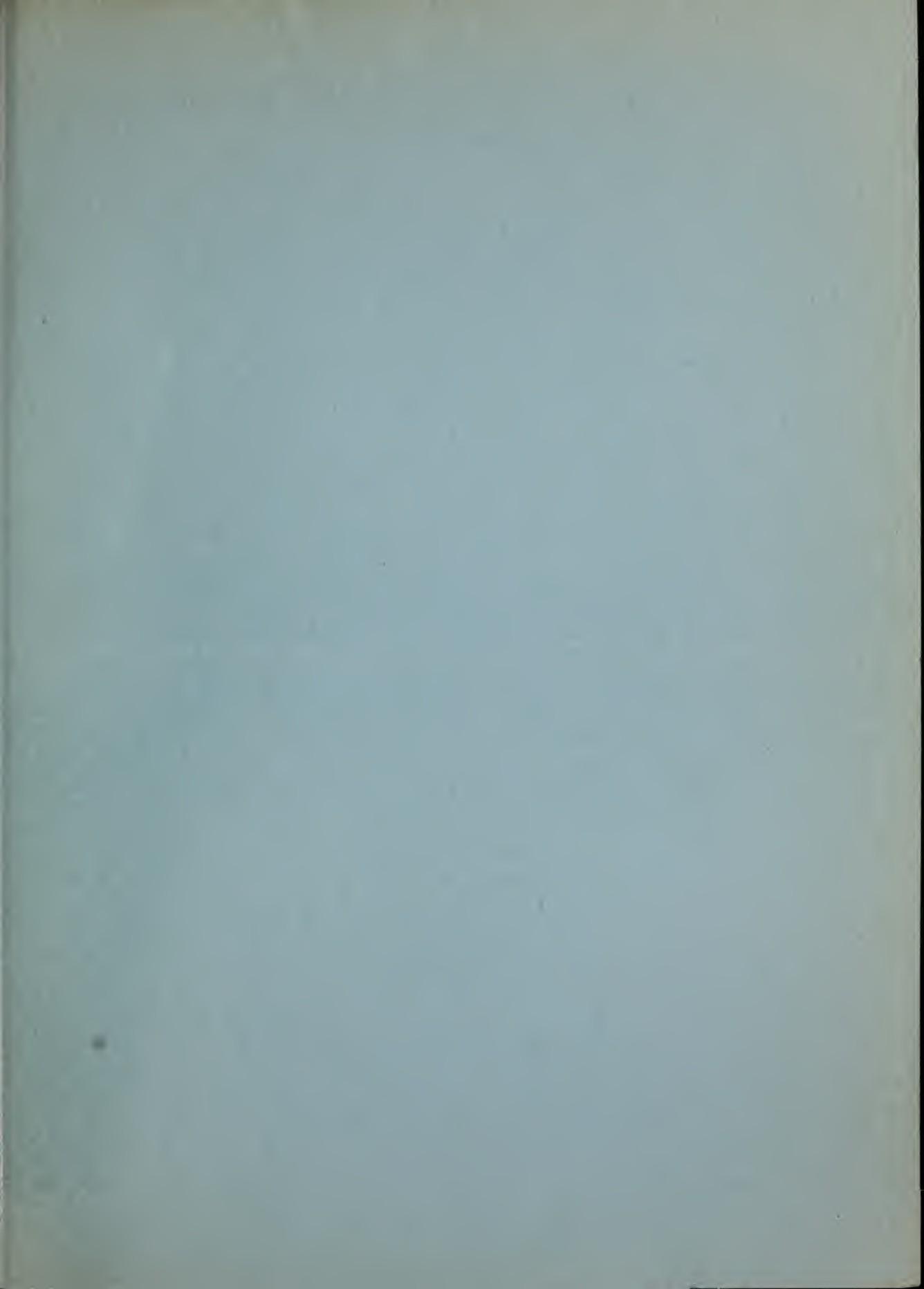
** - Courses with less than 15 years in the period 38-52 have all years prior to 52 in the average

(a) - Air observed

LIST AND LOCATION OF SNOW COURSES

No.	State	Name	Sec.	Twp.	Rge.	Elev.	No.	State	Name	Sec.	Twp.	Rge.	Elev.
<u>North Platte</u>							<u>Yampa</u>						
6J2	C	Park View	24	5N	78W	9200	6J1	C	Dry Lake	26	7N	84W	8300
6J3	C	Columbine	21	5N	82W	9300	6J4	C	Elk River	6	10N	85W	9300
6J7	C	Northgate	8	11N	79W	8500	6J8	C	Routt Line	13	5N	83W	9700
							6J9	C	Rabbit Ears	30	5N	83W	9550
							6J10	C	Yampa View	21	5N	84W	8500
<u>Laramie</u>							<u>White</u>						
6J12	C	Roach	5	10N	77W	9800							
5J15	C	McIntyre	35	10N	76W	9100	7K2	C	Burro Mountain	15	2S	91W	9000
							7J1	C	Rio Blanco	28	1N	88W	8500
<u>South Platte</u>							6J13	C	Clark	24	9N	85W	7800
5J1	C	Cameron Pass	2	6N	76W	10300	7J2	C	Flat Top	24	1N	87W	9500
5J2	C	Chambers Lake	6	7N	75W	9000	7J3	C	Bear River	14	1N	86W	9100
5J3	C	Big South	33	8N	75W	8600							
5K1	C	East Portal	2	2S	74W	9400	<u>Plateau Creek</u>						
6K1	C	Hoosier Pass	13	8S	78W	11400	7K4	C	Mesa Lakes	35	11S	96W	10000
5K2	C	Fairplay	33	9S	77W	10000	7K5	C	Trickle Divide	23	11S	94W	10000
5J5	C	Wild Basin	24	3N	71W	10000							
5J6	C	Deadman Hill	25	10N	75W	10200							
5J8	C	University Camp	26	1N	73W	10300	<u>Gunnison</u>						
5K5	C	Loveland Pass	27	4S	76W	10600	6L1	C	Crested Butte	22	13S	86W	9000
5J11	C	Hour Glass Lake	18	7N	73W	9500	6L2	C	Park Cone	19	14S	82W	9700
5K8	C	Jefferson Creek	14	7S	76W	10100	7K3	C	Alexander Lake	2	12S	95W	10000
5J13	C	Hidden Valley	23	5N	71W	9550	7M6	C	Ironton Park	29	43N	7W	9800
5J17	C	Deer Ridge	19	5N	73W	9050	7K6	C	Park Reservoir	34	11S	94W	9500
5J18	C	Copeland Lake	21	3N	73W	8600	6L3	C	Porphyry Creek	19	49N	6E	10800
5K10	C	Empire	21	3S	75W	9650	7K7	C	Kannah Creek	5	12S	95W	10700
5K11	C	Geneva Park	18	6S	71W	9750	7K8	C	Lake City	13	43N	4W	10300
5J20	C	Red Feather	26	10N	71W	9000	7M8	C	McClure Pass	1	11S	89W	9500
5K12	C	Moffatt	2	2S	71W	9400	7M15	C	Red Mountain	13	42N	8W	11000
5J21	C	Ward	1	1N	73W	9500	7K9	C	Ward Lake	2	12S	95W	10000
5K13	C	Berthoud Falls	15	3S	75W	10500							
5J22	C	Longs Peak	32	8N	73W	10500	<u>San Juan</u>						
5J23	C	Lost Lake	32	8N	75W	9300	6M3	C	Upper San Juan	1	37N	1E	10000
5K17	C	Clear Creek	28	4S	76W	11200	7M4	C	Silverton	10	41N	7W	9400
5J25	C	Boulder Falls	26	1N	73W	10000	7M5	C	Cascade	13	39N	9W	8850
5J26	C	Two Mile	22	5N	74W	10500	7M7	C	Granite Peaks	23	37N	6W	7950
<u>Arkansas</u>							7M10	C	La Plata	4	36N	11W	9700
6K2	C	Tennessee Pass	21	8S	80W	10200	7M11	C	Spud Mountain	32	40N	8W	10700
6K3	C	Twin Lakes Tunnel	22	11S	82W	10500	7M12	C	Molas Lake	7	40N	7W	10500
5M1	C	LaVeta Pass	22	28S	70W	9300	7M13	C	Howardville	12	41N	7W	9800
6K7	C	Four Mile Park	23	11S	81W	9700	7M14	C	Mineral Creek	35	42N	8W	10300
5M2	C	Blue Lakes	30	31S	69W	10000							
6L4	C	Monarch Pass	16	49N	6E	10500	<u>Dolores</u>						
6L5	C	Saint Elmo	31	15S	80W	10600	7M1	C	Rico	11	39N	11W	8700
6K11	C	Timberline	8	9S	81W	11100	7M2	C	Telluride	6	42N	8W	8600
6K16	C	Cooper Hill	14	8S	80W	10600	7M3	C	Lizard Head	24	41N	10W	10300
6K17	C	East Fork	15	8S	79W	10700	7M9	C	Trout Lake	8	41N	9W	9700
5L2	C	Westcliffe	19	22S	73W	9000							
<u>Upper Colorado</u>							<u>Rio Grande (Colorado)</u>						
5J4	C	Phantom Valley	7	5N	75W	9300	6M1	C	Wolf Creek Pass	4	37N	2E	10000
5K3	C	Berthoud Pass	35	2S	75W	9700	7M6	C	Upper Rio Grande	13	40N	1W	9350
5K4	C	M. F. Camp Ground	16	3S	77W	9000	6M4	C	Silver Lakes	15	36N	5E	9600
6K5	C	Fiddler Gulch	1	8S	80W	11000	6M5	C	River Springs	25	33N	6E	9300
5J7	C	Lulu	25	6N	76W	10200	6M6	C	Summitville	30	37N	4E	11500
6J5	C	Willow Creek Pass	1	4N	78W	9500	6M7	C	Cumbres Pass	17	32N	5E	10000
5J9	C	N. Inlet Grand Lake	26	4N	75W	9000	7M7	C	Santa Maria	8	41N	2W	9700
5J10	C	Lake Irene	8	5N	75W	10600	5M3	C	Culebra	37.2N	105.2W		10000
5K6	C	Arrow	34	1S	75W	9900	5M4	C	Fort Garland	13	29N	72W	8200
5K7	C	Lapland	16	2S	79W	9500	6M9	C	Platoro	22	36N	4E	9950
6K8	C	Fremont Pass	3	8S	76W	11100	6M10	C	West Conejos	21	34N	5E	9450
6J6	C	Lynx Pass	10	1N	83W	9100	6M11	C	LaManga	23	33N	5E	10000
5K9	C	Shrine Pass	15	6S	79W	10500	7M8	C	Pyramid	26	41N	5W	10300
6K20	C	Glen-Mar Ranch	31	2S	77W	8850	7M9	C	Spring Creek Pass	2	42N	3W	10900
5J14	C	Monarch Lake	30	2N	74W	8500	6M14	C	Pool Table Mt.	19	41N	2E	10000
5J16	C	Granby	11	2N	77W	8700	6M15	C	Lake Humphrey	32	40N	1E	9300
5J19	C	Grand Lake	30	4N	75W	8600	6L6	C	Cochetopa Pass	12	45N	3E	10000
5K14	C	Berthoud Summit	10	3S	75W	11300	7M20	C	Porcupine Pass	2	41N	3W	10400
5K15	C	Frazer View	34	2S	75W	10600	6M17	C	Wolf Creek Summit	6	37N	2E	11000
6J11	C	Gore Pass	2	1N	82W	8900							
6K13	C	Frisco	18	6S	78W	9300	<u>Rio Grande (New Mexico)</u>						
5K16	C	Snake River	9	5S	76W	9700	5N1	NM	Red River	29	28N	15E	9500
6K14	C	Summit Ranch	8	4S	78W	10000	5N2	NM	Taos Canyon	10	25N	15E	9000
5J24	C	Milner Pass	7	5N	75W	10100	5P1	NM	Aspen Grove	12	18N	10E	9100
6K15	C	Vail Pass	28	5S	79W	10000	5N3	NM	Hematite Park	8	28N	15E	9500
6K18	C	Kokomo	23	7S	79W	10600	5N4	NM	Tres Ritos	23	22N	13E	9000
6K19	C	Pando	10	7S	80W	9500	6N1	NM	Payrole	16	28N	7E	9700
<u>Roaring Fork</u>							6N2	NM	Chama Divide	36.9N	106.7W		7750
6K4	C	Ind. Pass Tunnel	20	11S	82W	10700	5N5	NM	Chamita	36.9N	106.7W		8500
7KL	C	North Lost Trail	20	11S	87W	9200	5P2	NM	Cordova	28	22N	13E	10100
6K6	C	Nast	1	9S	83W	8700	5P3	NM	Panuelua	27	19N	12E	8300
6K10	C	Ivanhoe	12	9S	82W	10400	5P4	NM	Big Tesuque	17	18N	11E	10000
							5P5	NM	Elk Cabin	8	17N	11E	8250
							6P1	NM	Rio En Medio	8	18N	11E	10100
							6N4	NM	Quemazon	34	20N	5E	9300
							6N4	NM	Bateman	5	26N	6E	9300
							6P2	NM	Fenton Hill	7	19N	3E	8900





Federal - State - Private

COOPERATIVE SNOW SURVEYS

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Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

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"WATER IS THE WEST'S GREATEST RESOURCE"